

ABSTRACT

On a multilayer dielectric substrate 23, a signal via 65 that is connected to a bias-and-control-signal terminal of a high-frequency semiconductor 43, and is arranged inside electromagnetic shielding members 24 and 25; a signal via 65 that is arranged at the outside of the electromagnetic shielding members 24 and 25, and is connected to an external terminal 51 for a bias and control signal; an internal-layer signal line 60 that connects between the signal vias 65; an internal-layer ground conductor 70 that is disposed around the signal vias 65 and the internal-layer signal line 60; and plural ground vias 75 that are arranged around the signal vias 65 and the internal-layer signal line 60, on the internal-layer ground conductor 70 are provided. A resistance film 80 is provided on at least one of an upper surface and a lower surface of the internal-layer signal line 60, thereby suppressing a high-frequency component from leaking to outside a high-frequency package.